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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,276	08/05/2003	Andreas Fath	071308.0463	7127

31625 7590 04/25/2006

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AUSTIN, TX 78701-4039

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/634,276	Applicant(s) FATH ET AL.	
	Examiner Christopher S. Kim	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,6 and 8-10 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,3,6 and 8-10 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. The response filed February 14, 2006 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "the outer surfaces of the conical nozzle tip provided directly adjacent the frusto-conical body section." The disclosure, as originally filed, fails to teach that the outer surfaces of the conical nozzle tip 12 is provided directly adjacent the frusto-conical body section 24. Rather, the specification teaches that the cylindrical needle section 16 and the sealing edge 14 is between the conical nozzle tip 12 and the frusto-conical body section 24.

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5. Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the outer surfaces " in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the conical nozzle tip" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "a sealing edge" in line 2. This appears to be a double inclusion of the "sealing edge" recited in claim 1.

### ***Claim Rejections - 35 USC § 102***

6. Claims 1, 3, 6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hofmann et al. (WO 99/30028).

Hofmann discloses a fuel injection valve comprising: a nozzle body 30; a nozzle needle 10; conical nozzle needle tip 12; frusto-conical body section 51.

In claim 6, the recitation "such that the gap is operable to hydraulically dampen movement of the nozzle needle seat toward the nozzle body seat" merely requires the ability/capability to operate in such a manner. The device of Hofmann has the capability to operate in such a manner because the gap of Hofmann traps/contains part of the fuel flow.

7. Claims 1, 3, 6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ushimura (4,470,548).

Ushimura discloses a fuel injection valve comprising: a nozzle body 14; a nozzle needle 12; conical nozzle needle tip 40; frusto-conical body section 36.

In claim 6, the recitation "such that the gap is operable to hydraulically dampen movement of the nozzle needle seat toward the nozzle body seat" merely requires the ability/capability to operate in such a manner. The device of Ushimura has the capability to operate in such a manner because the gap of Ushimura traps/contains part of the fuel flow.

8. Claims 1, 3, 6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzgreffe (4,982,901).

Holzgreffe discloses a fuel injection valve comprising: a nozzle body 15; a nozzle needle 6; conical nozzle needle tip 21; frusto-conical body section 20.

In claim 6, the recitation "such that the gap is operable to hydraulically dampen movement of the nozzle needle seat toward the nozzle body seat" merely requires the ability/capability to operate in such a manner. The device of Holzgreffe has the capability to operate in such a manner because the gap of Holzgreffe traps/contains part of the fuel flow.

9. Claims 1, 3, 6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzgreffe et al. (5,012,981).

Holzgreffe discloses a fuel injection valve comprising: a nozzle body 15; a nozzle needle 6; conical nozzle needle tip 21; frusto-conical body section 20.

In claim 6, the recitation "such that the gap is operable to hydraulically dampen movement of the nozzle needle seat toward the nozzle body seat" merely requires the

ability/capability to operate in such a manner. The device of Holzgreffe has the capability to operate in such a manner because the gap of Holzgreffe traps/contains part of the fuel flow.

### ***Response to Arguments***

10. Applicant's arguments filed August 12, 2005 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not disclose that "the gap is operable to hydraulically dampen movement of the nozzle needle seat toward the nozzle body seat." The recitation merely requires the ability/capability to operate in such a manner.

11. Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

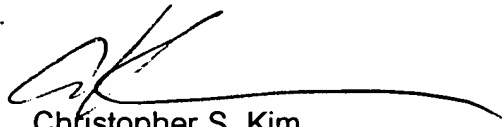
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim  
Primary Examiner  
Art Unit 3752

CK